

Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method for operating a line-card having a transponder and a transceiver for an asynchronous data transmission standard to relay data in accordance with a synchronous data transmission standard, said method comprising:

receiving a remotely transmitted signal formatted in accordance with said synchronous data transmission standard by said transponder;

recovering a clock signal from said remotely transmitted signal by said transponder;

in a first mode, directing said recovered clock signal to a clock input of said transceiver;
and

in a second mode, directing a locally generated clock to said clock input; and
switching from said first mode to said second mode upon loss of said remotely transmitted signal or upon loss of recovered framing in said remotely transmitted signal.

2. (canceled)

3. (canceled)

4. (original) The method of claim 1 wherein said synchronous data transmission standard is a SONET standard.

5. (original) The method of claim 1 wherein said synchronous data transmission standard is a G.709 standard.

6. (original) The method of claim 1 wherein said asynchronous data transmission standard is an Ethernet standard.

7. (original) The method of claim 1 further comprising:

transferring data recovered from said remotely transmitted signal to said transceiver for demultiplexing.

8. (original) The method of claim 7 further comprising:

using said transceiver to multiplex together multiple data streams to form a data signal for modulation onto an optical signal, said data signal being clocked by said recovered clock signal in said first mode and by said local clock in said second mode.

9. (currently amended) The method of claim 1 further comprising:

during said first mode, filtering said clock input using a phase lock loop operating at a first (fast) time constant; and

when switching from said second mode to said first mode, filtering said clock input using said phase lock loop operating at a second time constant, said second time constant being ~~longer~~ shorter than said first time constant.

10. (currently amended) The method of claim 9 further comprising:

when switching from said first mode to said second mode, filtering said clock input using said phase lock loop operating at said ~~first~~ second time constant.

11. (original) Apparatus for operating a transceiver for an asynchronous data transmission standard to relay data in accordance with a synchronous data transmission standard, said apparatus comprising:

a transponder that receives a remotely transmitted signal formatted in accordance with said synchronous data transmission standard and recovers a clock signal from said remotely transmitted signal;

a local clock source; and

a multiplexer that, in a first mode, directs said recovered clock signal to a clock input of said transceiver and, in a second mode, directs output of said local clock source to said clock input, said multiplexer switching from said first mode to said second mode upon loss of said remotely transmitted signal and switching from said first mode to said second mode upon loss of recovered framing in said remotely transmitted signal.

12. (canceled)

13. (canceled)

14. (original) The apparatus of claim 11 wherein said synchronous data transmission standard is a SONET standard.

15. (original) The apparatus of claim 11 wherein said synchronous data transmission standard is a G.709 standard.

16. (original) The apparatus of claim 11 wherein said asynchronous data transmission standard is an Ethernet standard.

17. (original) The apparatus of claim 11 wherein data recovered from said remotely transmitted signal is transmitted to said transceiver for demultiplexing.

18. (currently amended) The apparatus of claim 11 further comprising:
a phase lock loop that, during said first mode, filters said clock input using a first time constant and when switching from said second mode to said first mode, filters said clock input using a second time constant, said second time constant being ~~longer~~ shorter than said first time constant.

19. (currently amended) The apparatus of claim 18 wherein, when switching from said first mode to said second mode, said phase lock loop filters using said ~~first~~ second time constant.

20. (canceled)

21. (new) The method of claim 9 wherein in switching from said second mode to said first mode, directing said recovered clock signal to said clock input of said transceiver; and

filtering said clock input using said phase lock loop operating at a said first time constant when said phase lock loop is locked to said recovered clock signal.